



# Washington State Enhanced Hazard Mitigation Plan

## Plan Maintenance Process

The Washington State Hazard Mitigation Plan (SHMP) is a living document and will be reviewed, updated and adopted by state officials and submitted to the Federal Emergency Management Agency (FEMA) for approval every three years. The plan will be revised more frequently if conditions under which the plan was developed materially change – through new or revised state policy, a major disaster, or availability of funding, for example – to reflect the new reality of hazard mitigation in Washington State.

This chapter describes the identified framework through which the plan will be reviewed and revised, as well as revisions being made to the process for the 2010 plan. It will also discuss the effectiveness of the identified plan maintenance process from the 2007 plan. Historical data for the 2007-2010 update has been maintained at the bottom of each separate section, with a reference made to the information being historical in nature. Historical data from the 2004-2007 update has been removed.

### I. Monitoring, Evaluating, and Updating the Plan

**Requirement 44 CFR §201.4(c)(5)(i): *Plan Content.*** To be effective the plan must include a *Plan Maintenance Process* that includes an established method and schedule for monitoring, evaluating, and updating the plan.

The Mitigation and Recovery Section of the State Emergency Management Division (EMD) is responsible for developing and maintaining the SHMP. The section's Hazard Mitigation Strategist is the individual responsible for overseeing this work.

Participants in the plan maintenance process include the following:

- Members of the State Hazard Mitigation Advisory Team (SHMAT) (see Planning Process, Tab 2, for information on the makeup and involvement of this team in the state plan).
- Representatives of the agencies of Washington State Government that participated in development of the state plan (see Planning Process, Tab 2, for information on the agencies that are part of the state plan).

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- Representatives of local jurisdictions whose hazard mitigation plans were used in the development of the state plan.

The state plan review will take place in three ways:

- Annually, for progress made on mitigation actions and projects identified in the Mitigation Strategy of the state plan and in the agency annexes.
- After each major disaster in Washington State declared by the President, to look for areas where the state plan should be refocused due to the impact of the disaster.
- Every three years, before submission to FEMA for approval.

### **Annual Progress Review**

The purpose of the annual review is to gauge the progress as well as any changed conditions that may affect hazard mitigation planning and implementation in Washington State. The state plan will be revised annually only as necessary to reflect significant policy changes that took place during the preceding year.

Based on FEMA approving the SHMP in the summer of 2010, the annual review of the plan will take place in the summer (June-August) of each year; if approval takes place after this date, the initial annual review will occur approximately 12 months following approval.

Review on progress implementing the actions and projects identified in the state plan's Mitigation Strategy will occur annually. State agencies that are part of the state plan will submit brief progress reports on an annual basis, tentatively occurring during the month of March, but the schedule will be determined by the date of the state plan approval. Information from these reports will form the basis for a summary of progress submitted by EMD's Mitigation and Recovery Section for the annual report of the State Emergency Management Council.

Once a year, SHMAT and the state agencies whose annexes are part of the plan will:

- Review and revise the state plan's Risk Assessment as necessary to ensure its currency. This will include a review and update of hazard profiles and data on vulnerable state facilities as new information becomes available.
- Examine progress on mitigation actions and projects in the state plan's Mitigation Strategy and in agency annexes.
- Identify implementation problems (technical, political, legal, and financial).

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- Recommend how to increase involvement by state agencies and local jurisdictions in hazard mitigation.
- Recommend revisions to the Risk Assessment and to the Mitigation Strategy's goals and objectives, projects and timelines only to reflect major changes in policies, priorities, programs, and funding.

2010-2013 Plan Maintenance: As part of the 2010 update, the 2007 process (historical data below) was analyzed and revised to better reflect the resource capabilities of the State and more specifically the Mitigation Response and Recovering Section. The changes reflect the needs of the State and lessons learned during the previous 3-year planning period.

Plan maintenance implies an ongoing effort to monitor and evaluate plan implementation and to update the plan as progress, roadblocks, or changing circumstances are recognized. During the 2007-2010 update cycle the state faced some significant roadblocks which impacted not only the plan's update, but also the plan's status with respect to the mitigation activities of the state agencies. Due to limited state revenue, many of the action items which had an anticipated end date during the lifespan of this plan did not occur. Therefore, those action items which were not completed will continue within the plan. Some of the action items became obsolete or are no longer practical, and have been removed from the general strategies and moved to Tab 13, the *Annex* portion of the plan. During the next update cycle, those items will be removed.

The state of the economy also caused additional roadblocks with respect to the local jurisdictions. Many local jurisdictions found themselves with significantly reduced workforces, requiring additional assistance by the state to help complete expiring mitigation plans (this issue is discussed in greater detail within Tab 3, *Coordination of Local Mitigation Planning*). This additional technical assistance reduced the amount of time the Mitigation Strategist could actually invest in the State's update – and is one of the lessons learned.

The final major roadblock relates to the Howard Hanson Dam and the extensive amount of planning devoted by state and county agencies in an effort to ready communities for the potential dam failure (e.g., evacuation plans, sheltering plans, response plans, etc.). During the same time period that those planning initiatives were taking place, King County's Regional Hazard Mitigation Plan was expiring. In an effort to assist King County jurisdictions to complete their mitigation plans, a newly formed User's Group was utilized, which provided technical assistance to several jurisdictions at one time through the use of a planning cadre in an attempt to complete the local mitigation plans prior to lapsing. (Information on Howard Hanson Dam is detailed in the *Dam Safety* profile, Tab 5, *Risk Assessment*.)

During the 2007-2010 update cycle, it was anticipated that the SHMP would be extensively reorganized into a publication software for ease in future updates, but that

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did not come to fruition. During the 2010-2013 update cycle, the focus will again be on a more extensive reorganization of the State's plan to create a document which is more clearly organized for ease of use.

As was with previous plan editions and will remain in force during the 2010-2013 update cycle, various plan elements will be monitored, evaluated and updated throughout the three year planning period via the Mitigation Strategist, with the SHMAT monitoring efforts and providing information as needed/requested. These efforts will include, but are not limited to additional SHMAT meetings, and through day to day operations of the Mitigation Planning and Recovery Unit.

### **Discussion of Effectiveness of 2007-2010 Process:**

The concept for an annual review of the entire plan by the SHMAT remains sound. The framework described in the *Annual Review Process* (above) will continue for the next three years.

It was also determined the most efficient way to lead the update effort is to manage the Plan as any large project. As such, there will be a dedicated mitigation staff member assigned to monitor and evaluate the Plan throughout the three year update process. In coordination with the SHMAT, this dedicated staff person will manage the following:

- Progress made on goals and objectives
- Modifications to the State risk and vulnerabilities as needed
- Implementation of mitigation actions and projects
- Changes in policies or programs discussed in the Plan

Sub-groups will be established, with representatives from the various SHMAT agencies and organizations responsible for reviewing the plan and providing input and suggested changes. This input is based on subject matter expertise, on-going studies, and mitigation initiatives being undertaken by SHMAT members and their respective agencies or organizations. Additional emphasis will be placed on developing a system for tracking mitigation strategies, and assisting the state agencies in developing more in-depth action items.

During the planning period, state agencies will:

- Review hazard mitigation projects and initiatives and report on progress of completed, deleted, or deferred projects, as well as reporting any new initiatives/projects.
- State agencies will also review existing state/federal programs to ensure that the state is taking full advantage of possible funding sources in its implementation of the state hazard mitigation program.

As indicated within of Tab 5, *Risk Assessment*, Appendix 1 – *Analysis of Local Hazard Vulnerability*, the following should also occur during the 2010-2013 update cycle in addition to those items referenced above.

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- Review of the Drought and Avalanche hazard profiles should again be conducted to determine whether or not the hazards should remain among the State's hazards of concern.
- Update of the Volcano profile to include studies conducted DNR occurring during the 2010-2013 timeframe, including a more in-depth analysis for ash fall.
- Review and update the Wildfire profile utilizing new data gathered during the 2010 assessment required as an amendment to the Cooperative Forestry Assistance Act (CFAA), as enacted in the 2008 Farm Bill.
- Make only minor changes as necessary to update the criteria used to determine most vulnerable counties for the earthquake, flood and landslide hazards.
- Enhance the profile for Climate Change to capture more of the information from the local plans. During the 2010 update process, a few jurisdictions had addressed Climate Change within their mitigation plans. The profile should be reviewed to include more specific information if warranted.
- Prepare hazard profiles within the SHMAP for any other man-made and technological hazards which appear with frequency in the local jurisdictions' plans.
- Continue working on a method of Risk Assessment which can be utilized by the local jurisdiction plans. The next plan edition should include economic and social risk ranking criteria.
- Develop a method of capturing in greater detail the strategies of the local jurisdictions for inclusion within the State's plan. The focus of these strategies should be geared towards those strategies which are significant in nature, not generic or overly broad.

### **Historical Data:**

2007 – 2010 Plan: The concept for an annual review by SHMAT is sound, and the framework described above will continue for the next three years with the following revisions:

Separate agency annexes to the state plan, each with separate narratives and mitigation goals, objectives and action items will not be required. Beginning with this plan, one set of mitigation goals will cover all participating agencies, and all agency mitigation action items will be included into one table in the Mitigation Strategy section of this plan. State agency participation will continue to be required in the plan review and revision process.

Annual progress reports by participating state agencies will be required rather than semi-annual reports.

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### Post-Disaster Review 2010-2013 Process:

After each Presidentially-declared major disaster in Washington State, EMD's Mitigation and Recovery Section will document the effects of the disaster, and convene the SHMAT to examine the disaster and, as necessary, develop recommendations to improve resistance to the hazard. This process allows for a review of the state plan and the impacts of the hazard that caused the event, as well as providing an opportunity to determine whether any of the Mitigation Strategies require revision.

In documenting the disaster, EMD's Mitigation and Recovery Section may consult representatives from FEMA, appropriate state and local agencies, and private sector partners impacted by the disaster. If determined necessary, approximately six months after the event, the Mitigation Section will prepare and disseminate a report outlining the disaster and its impact, and propose new or revised recommendations for the state plan's Mitigation Strategy.

Such a post-disaster review may replace an annual review in any year a major disaster event occurs, depending upon severity of the disaster event and on the timing of the survey and the state plan's annual progress review.

**Discussion of Effectiveness 2007-2010 Cycle:** The state received three disaster declarations after approval of the 2007 plan:

- December 2007 Severe Storms and Flooding (DR-1734);
- January 2009 Severe Winter Storm, Landslide, Mudslide and Flooding (DR-1817); and
- December-January Severe Winter Storm, Record and Near-Record Snow (DR-1825).

The Hazard Mitigation Strategist met with the SHMAT to review the Severe Storm, Landslide, and Flooding profiles after these events occurred. It was determined that the profiles remained fairly current as written, with the exception of inclusion of the new disaster events in the historical data portion of the profile. The Strategist and SHMAT came to the conclusion that as the plan was again in its update cycle, the profiles would be updated with new information during the normal update cycle, which was already underway at the time the team met. Additionally, EMD's Mitigation and Recovery Section documented impacts of the disasters to make certain accurate information would be included.

The Mitigation staff at the Joint Field Office also requested Losses Avoided Studies be conducted for properties impacted by the disasters. The projects included in this study were:

- Drainage improvements consisting of a culvert upsizing and channel dredging in the City of Issaquah, and

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- Installation of a flood drainage gate along the Stillaguamish River levee near the City of Stanwood.

The drainage improvement projects reported an overall Return on Investment of 96.7% successful after only two years into the project's useful life cycle.

### **Three-Year Plan Review and Revision:**

Every three years, EMD's Hazard Mitigation Section, will facilitate review and revision of the Washington SHMP prior to its submission to FEMA for approval. The review will begin approximately 12 months before FEMA approval is required. Review and revision will involve SHMAT and state agencies and local jurisdictions whose plans influenced development of the state plan. Additionally, the SHMP will be coordinated with other state plans, as appropriate.

It is the state's intent that the 2013 edition of the plan should continue to address both natural and manmade or technological hazards. The state plan's Risk Assessment will incorporate profiles for each of the identified manmade or technological hazards that affect Washington State.

To the extent possible, local multi-jurisdiction hazard mitigation plans completed as of the start of the three-year review and revision cycle will provide the basis for revising the state plan, especially those sections related to hazard identification and risk assessment.

During the 2010-2013 update cycle it is the intent of State and FEMA Region X to work together in an attempt to develop a method to incorporate already existing plans such as Flood Hazard Management/Mitigation Plans, Comprehensive Wildfire Protection Plans, etc., into the appropriate components of the local jurisdiction's mitigation plan in an effort to reduce redundancy in planning efforts.

### **2010-2013 Plan:**

The following framework will be the process used for the Three-Year Plan Review and Revision prior to the state plan's submission to FEMA in 2013:

- Review will continue to involve SHMAT and participating state agencies, as well as local jurisdictions as appropriate.
- Hazard and risk-assessment information in local plans that are revised and re-approved by fall 2012 will be reviewed and considered in the 2013 state plan update process.
- Hazard Profiles - New information and maps, as available, will be included in natural hazard profiles. Additionally, hazard experts will review the profiles for completeness and accuracy.

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- Implementing Mitigation Actions - Participating state agencies and SHMAT will review the status of and progress on mitigation actions identified in the Mitigation Strategy of this plan.
- Effectiveness of state-funded, Local Mitigation Projects: This initiative is addressed in the section of the state plan entitled “Loss Avoidance Study,” Tab 9, per the requirements of 44 CFR 201.5.b.2.iv.
- Identification of Implementation Issues: The EMD Mitigation and Recovery Section in conjunction with SHMAT will examine issues related to implementing mitigation actions identified in this plan and make recommendations for their resolution in the 2013 plan.
- Increase State, Local Participation in Hazard Mitigation:
  - The EMD Mitigation and Recovery Section will continue its outreach to state agencies in a variety of ways, including but not limited to State Agency Liaison meetings; one-on-one meetings with agency staff; through critical infrastructure protection, homeland security, and other related planning initiatives; and through the office of The Adjutant General, State Military Department, to the Governor’s Cabinet, as necessary.
  - Section staff also will continue outreach to local jurisdictions through presentations at conferences, web-based trainings, one-on-one technical assistance visits, scheduling of mitigation-related training and workshops (mitigation planning, benefit-cost analysis, application preparation, etc.); and continued communication through phone, email and Internet, among other means.
  - An inventory of state-owned and leased facilities maintained annually by the State Office of Financial Management will again be used as the facilities database for the 2013 SHMP. Use of this database will continue to be expanded in the coming years to meet the needs of a variety of state planning initiatives, including hazard mitigation; this will streamline the collection of information on state facilities, reduce the burden on state agencies participating in the state hazard mitigation planning initiative, and should encourage increased participation.
- Revisions to Risk Assessment and Mitigation Strategy: SHMAT, hazard experts and others will continue to review the various elements of the plan, and assist with the update of the Risk Assessment and Mitigation Strategy portions for the 2013 plan.
- Plan Maintenance: The EMD Mitigation and Recovery Section will continue to monitor the process of maintaining the state plan, involving SHMAT and others as needed and appropriate.



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- In coordination with FEMA Region X, establish a subcommittee of the State Advisory Team to explore the feasibility of integrating hazard mitigation with other statewide planning initiatives.

### **2007-2010 Status Report:**

The following framework was designated as the process from the 2007 plan for use during the update cycle for the 2010 submission. Status as of the 2010 update cycle is indicated directly below each item.

2007 Recommendation: Review will continue to involve SHMAT and participating state agencies, as well as local jurisdictions as appropriate.

2010 Status: SHMAT, participating state agencies (increased number of state agencies participating in 2010 plan edition by 16 – complete list available in Tab 2) and local jurisdictions involved throughout process; enhanced working relationship with several private industry consultants who develop mitigation plans within the State. These consultants provided input into risk assessment methodology, provided general information for inclusion in plan and the Loss Avoidance Study, and assisted with technical assistance workshops administered to 40 jurisdictions statewide.

2007 Recommendation: Include man-made and technological hazards in the 2010 plan.

2010 Status: Four new man-made and technological hazards are included in the 2010 plan edition: Hazardous Materials, Climate Change, Public Health and Dam Safety.

2007 Recommendation: Hazard and risk-assessment information in local plans that are revised and re-approved by mid 2009 will be reviewed and considered in the 2010 state plan update process.

2010 Status: Local hazard mitigation plans were reviewed from April 2007 through January 31, 2010 for hazard information and potential losses from risk assessments that could be incorporated into this update of the state plan. More detailed information on this subject is incorporated within the *Risk Assessment* Introduction section, Tab 3.

2007 Recommendation:

Item 1 - Hazard Profiles: New information and maps, as available, will be included in natural hazard profiles. Additionally, hazard experts will review the profiles for completeness and accuracy.

2010 Status:

Seven of the nine hazards (all except Drought and Volcano) were updated and enhanced with new information and maps, and reviewed by hazard experts as stated within Tab 2, *Planning Process*.

2007 Recommendation:

Item 2 - Implementing Mitigation Actions: Participating state agencies and SHMAT will review the status of and progress on mitigation actions identified in the Mitigation Strategy of this plan.

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2010 Status: State agencies reviewed strategies, provided updated information, and some agencies developed new action items.

2007 Recommendation:

Item 3, Effectiveness of state-funded, Local Mitigation Projects: This initiative will be addressed in the section of the state plan entitled “Enhanced Plan – Comprehensive State Hazard Mitigation Program,” Tab 3, per the requirements of 44 CFR 201.5.b.2.iv, and dropped from this section of the plan.

2010 Status: A Losses Avoided Study has been completed for several projects which were FEMA/Local/State funded – detailed information in Tab 9, *Loss Avoidance Study*. The State Department of Transportation, Transportation Partnership Account (for Bridge Safety) and Flood Control Assistance Account Program also provided supported mitigation projects – detailed information in Tab 6, *Mitigation Strategy*.

2007 Recommendation:

Item 4, Identification of Implementation Issues: The EMD Mitigation and Recovery Section in conjunction with SHMAT will examine issues related to implementing mitigation actions identified in this plan and make recommendations for their resolution in the 2010 plan.

2010 Status: During SHMAT meetings, the issue was discussed and it was decided that during the 2010-2013 update cycle, EMD Mitigation and Recovery Section will meet one-on-one with state agencies in an attempt to determine feasibility of some mitigation actions, as well as assist jurisdictions to develop more in-depth action items. During 2010 update, these 1-1 meetings were focused on larger state agencies (Depts. of Transportation, Natural Resources and Ecology), and as a result, strategies for these agencies are more focused with a better understanding of the desired end result.

2007 Recommendation:

Item 5, Increase State, Local Participation in Hazard Mitigation:

- a. The EMD Mitigation and Recovery Section will increase its outreach to state agencies in a variety of ways, including but not limited to State Agency Liaison meetings; one-on-one meetings with agency staff; through critical infrastructure protection, homeland security, and other related planning initiatives; and through the office of The Adjutant General, State Military Department, to the Governor’s Cabinet, as necessary.
- b. Section staff also will increase outreach to local jurisdictions through presentations at conferences, one-on-one technical assistance visits, scheduling of mitigation-related training and workshops (mitigation planning, benefit-cost analysis, application preparation, etc.); and increased communication through phone, email and Internet, among other means.
- c. An inventory of state-owned and leased facilities maintained annually by the State Office of Financial Management will be used as the facilities database for the 2010 SHMP. Use of this database will be expanded in the coming years to meet the needs of a variety of state planning initiatives including hazard mitigation; this will streamline the collection of information on state facilities,

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reduce the burden on state agencies participating in the state hazard mitigation planning initiative, and should encourage increased participation.

### 2010 Status:

- a. Through outreach activities, state agency participation in the plan increased by 16 state agencies during the 2007-2010 update cycle. A more detailed accounting of agency participation and new agencies to the 2010 plan is available in Tab 2, *Planning Process*.
- b. Local jurisdiction outreach and technical assistance was enhanced significantly during the 2007-2010 time period. The state increased the level of participation by local jurisdictions from 89% in 2007 to 99.43% as of January 2010. A more detailed analysis can be found within Tab 3, *Coordination of Local Planning*.
- c. The facilities dataset was enhanced dramatically during the 2010 update cycle. OFM and EMD worked with all state agencies to capture a more accurate accounting of state owned and leased facilities. The number of facilities indicated within previous editions of the plan decreased by a significant number in the 2010 plan due to elimination of redundancy and a higher level accuracy. A more detailed accounting of the data enhancement project can be found within Tabs 5, *Risk Assessment* and 10, *Methodology*.

2007 Recommendation: Item 6, Revisions to Risk Assessment, Mitigation Strategy: SHMAT, hazard experts and others will continue to review the individual pieces of the plan and the complete Risk Assessment and Mitigation Strategy for the 2010 plan.

2010 Status: A new Risk Assessment was conducted during this update cycle. This includes a Risk Assessment Methodology. More detailed information can be found in Tab 5, *Risk Assessment*.

### 2007 Recommendation:

Item 7, Plan Maintenance: The EMD Mitigation and Recovery Section will continue to monitor the process of maintaining the state plan, involving SHMAT and others as needed and appropriate.

2010 Status: State agency review of annexes: Agency annexes were eliminated in this plan; however, state agencies will continue to review and report on mitigation action items belonging to them on an annual basis.

**Discussion of Effectiveness:** In general, the framework for the 2007-2010 plan review and revision described above was followed, with the following exceptions:

The three-year review of the plan began in January 2009, with involvement from SHMAT and participating state agencies (for details, see *Planning Process* section, Tab 2).

Natural hazard profiles in the 2007 state plan were reviewed and updated (for details, see *Risk Assessment Introduction*, Tab 5). The initiative to develop profiles for man-made and technological hazards was completed. The 2007 plan maintenance section indicated that the profiles for Avalanche and Drought should be removed, as they were

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of low risk to the state as a whole. During the 2010 update cycle, because of significant avalanche activities during the 2007-2010 timeframe (described in detail in the Avalanche profile within the *Risk Assessment*, Tab 5), and the fact that we have an increased number of plans anticipated from Eastern Washington jurisdictions (those impacted most significantly by Drought) both profiles will be re-evaluated for continued inclusion in the SHMP during the 2010-2013 update cycle.

Local hazard mitigation plans were reviewed during the 2007- January 2010 timeframe for hazard information and potential losses from risk assessments that potentially could be incorporated into this update of the state plan. How such information is incorporated into this plan is discussed in the *Risk Assessment Introduction* section, Tab 5.

### Historical Data

2007-2010: The following framework will be the process used for the Three-Year Plan Review and Revision prior to the state plan's submission to FEMA in 2010:

Review will continue to involve SHMAT and participating state agencies, as well as local jurisdictions as appropriate.

Including man-made and technological hazards in the 2010 plan will depend, in part, upon timeliness of completed hazard profiles, as well as consultation with communities that will be reviewing and revising their local hazard mitigation plans during the 2007-2010 timeframe.

Hazard and risk-assessment information in local plans that are revised and re-approved by mid 2009 will be reviewed and considered in the 2010 state plan update process.

Item 1, Hazard Profiles: New information and maps, as available, will be included in natural hazard profiles. Additionally, hazard experts will review the profiles for completeness and accuracy.

Item 2, Implementing Mitigation Actions: Participating state agencies and SHMAT will review the status of and progress on mitigation actions identified in the Mitigation Strategy of this plan.

Item 3, Effectiveness of state-funded, Local Mitigation Projects: This initiative will be addressed in the section of the state plan entitled "Enhanced Plan – Comprehensive State Hazard Mitigation Program," Tab 3, per the requirements of 44 CFR 201.5.b.2.iv, and dropped from this section of the plan.

Item 4, Identification of Implementation Issues: The EMD Mitigation and Recovery Section in conjunction with SHMAT will examine issues related to implementing mitigation actions identified in this plan and make recommendations for their resolution in the 2010 plan.

Item 5, Increase State, Local Participation in Hazard Mitigation:

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The EMD Mitigation and Recovery Section will increase its outreach to state agencies in a variety of ways, including but not limited to State Agency Liaison meetings; one-on-one meetings with agency staff; through critical infrastructure protection, homeland security, and other related planning initiatives; and through the office of The Adjutant General, State Military Department, to the Governor's Cabinet, as necessary. Section staff also will increase outreach to local jurisdictions through presentations at conferences, one-on-one technical assistance visits, scheduling of mitigation-related training and workshops (mitigation planning, benefit-cost analysis, application preparation, etc.); and increased communication through phone, email and Internet, among other means.

An inventory of state-owned and leased facilities maintained annually by the State Office of Financial Management will be used as the facilities database for the 2010 SHMP. Use of this database will be expanded in the coming years to meet the needs of a variety of state planning initiatives including hazard mitigation; this will streamline the collection of information on state facilities, reduce the burden on state agencies participating in the state hazard mitigation planning initiative, and should encourage increased participation.

Item 6, Revisions to Risk Assessment, Mitigation Strategy: SHMAT, hazard experts and others will continue to review the individual pieces of and the complete Risk Assessment and Mitigation Strategy for the 2010 plan.

Item 7, Plan Maintenance: The EMD Mitigation and Recovery Section will continue to monitor the process of maintaining the state plan, involving SHMAT and others as needed and appropriate.

State agency review of annexes: Agency annexes were eliminated in this plan; however, state agencies will continue to review and report on mitigation action items belonging to them on an annual basis.

**Discussion of Effectiveness:** In general, the framework for the three-year plan review and revision described above was followed, but not entirely:

The three-year review of the plan began in March 2006, with involvement from SHMAT and participating state agencies (for details, see Planning Process section, Tab 2).

Natural hazard profiles in the 2004 state plan were reviewed and updated (for details, see Risk Assessment Introduction section, Tab 3). However, the initiative to develop profiles for man-made and technological hazards was not completed due to other priorities within the Planning and Mitigation and Recovery sections of EMD, where the bulk of the work would be accomplished. Therefore, profiles for man-made and technological hazards were not included in the 2008 plan. The EMD Planning Section plans to complete these hazard profiles after the 2008 plan edition, and will utilize them

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for revising the state's Comprehensive Emergency Management Plan in 2009. Whether man-made and technological hazards will be included in the 2010 update of the SHMP will depend, in part, upon timeliness of their completion as well as the result of consultation with communities that will be reviewing and revising their local hazard mitigation plans during this period.

Local hazard mitigation plans were reviewed in late 2005 and early 2006 for hazard information and potential losses from risk assessments that potentially could be incorporated into this update of the state plan. How such information is incorporated into this plan is discussed in the Risk Assessment Introduction section, Tab 3.

In addition, for the items identified in numbers 1 through 7 in the *Three-Year Plan Review and Revision* above:

Item 1, Hazard Profiles: Available new information and maps were included in hazard profiles, and hazard experts reviewed the profiles (see Risk Assessment Introduction, Tab 3, for more information).

Item 2, Implementing Mitigation Actions: Participating state agencies and SHMAT reviewed the mitigation actions identified both in the Mitigation Strategy and in agency annexes. Table 1 and Table 2 later in the section document the status and progress of mitigation action items identified in the 2004 plan by state agencies participating in the 2007 plan.

Item 3, Effectiveness of state-funded, Local Mitigation Projects: This initiative was not completed.

Item 4, Identification of Implementation Issues: This initiative was not completed due to circumstances described above related to priority project and staffing limitations.

Item 5, Increase State, Local Participation in Hazard Mitigation:

The EMD Mitigation and Recovery Section identified shortfalls in follow-up participation by state agencies following publication of the 2004 state plan, and developed strategies to increase participation following publication of this plan.

The EMD State Hazard Mitigation Programs Manager, who oversees implementation of federally funded mitigation grant programs, surveyed local jurisdictions that expressed intent but did not apply for DR-1671 HMGP funding. Purpose of the survey was to determine what factors kept the jurisdictions from completing an application as well as what types of assistance the jurisdictions believe they need to become successful applicants. A similar survey will be conducted following closure of the DR-1682 HMGP application period on July 31, 2007. Survey results will be used to develop strategies and actions designed to increase local and state agency participation in mitigation funding programs available following disasters (HMGP) as well as on an annual basis (PDM, FMA, etc.).

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Item 6, Revisions to Risk Assessment, Mitigation Strategy: SHMAT reviewed and reaffirmed the mitigation goals and objectives of the state hazard mitigation program as stated in the Mitigation Strategy. The team also reviewed and reaffirmed the natural hazards identified as priority hazards for mitigation initiatives as stated in the Risk Assessment Introduction.

Item 7, Plan Maintenance: The EMD Mitigation and Recovery Section rather than SHMAT conducted the review of the process to maintain the SHMP. Revisions to the process are described throughout this section.

State agency review of annexes: Agencies reviewed progress made on action items identified in their annexes twice during the 2004-2007 timeframe.

## II. Monitoring Progress of Mitigation Activities

**Requirement 44 CFR §201.4(c)(5)(ii & iii): *Plan Content.*** To be effective the plan must include a *Plan Maintenance Process* that includes:

A system for monitoring implementation of mitigation measures and project closeouts.

A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategy.

The process used to monitor the implementation of mitigation measures and project closeouts will be similar to the one used to monitor, evaluate and update the plan. EMD's Mitigation and Recovery Section is responsible for monitoring implementation of projects identified in the state plan and agency annexes. The section's Hazard Mitigation Strategist will oversee this work.

Review on progress implementing the actions and projects identified in the state plan's Mitigation Strategy will occur once a year. State agencies that are part of the state plan will submit brief progress reports on an annual basis, in the summer months, with the exact schedule to be determined by the date of the state plan approval. The EMD Mitigation and Recovery Section will track progress of actions and projects identified in the state plan and agency annexes.

Once a year, the SHMAT and the state agencies that are part of the plan will:

Examine progress on mitigation actions and projects in the state plan's Mitigation Strategy and in agency annexes, using information from progress reports and the project database.

Identify implementation problems (technical, political, legal, and financial) and, as appropriate, develop recommendations and strategies to overcome them.

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Develop a summary of progress for the annual report of the Governor's Emergency Management Council submitted by EMD's Mitigation Section.

State agencies with projects identified that end up funded by the HMGP, the PDM, the FMA, and other federally funded mitigation grant programs, will be required to make quarterly reports of progress to EMD's Mitigation Section. Additionally, agencies and local governments receiving hazard mitigation grants are required to submit a closeout report at the conclusion of any grant-funded project. Information from these quarterly reports also will be tracked and reviewed on an annual basis, using the process described above. More information on the process used to monitor progress of mitigation actions funded by hazard mitigation programs listed above can be found in the Hazard Mitigation Administrative Plan, Tab 8. Additionally, new to the SHMP for the 2010 edition is the *Loss Avoidance Study*, Tab 9, which will review the effectiveness of mitigation projects at both the state and local levels.

**Discussion of Effectiveness:** As discussed in the pages above, state agencies provided two annual reports and SHMAT was convened in January 2009 and March 2010 to examine the progress on implementation of mitigation actions identified in the 2004 and 2007 state plans. The State Hazard Mitigation Programs Manager made quarterly reports to FEMA on progress implementing mitigation grant-funded projects and conducted project monitoring and closeout activities as described in the state's *Hazard Mitigation Programs Administrative Plan*, Tab 8. EMD Mitigation and Recovery Section staff prepared an annual report of mitigation activities that was included in the annual report of the Governor's Emergency Management Council.

**2010-2013 Plan:** The state will continue to follow the framework of monitoring progress of and closing out mitigation projects as described above.

### **2010 Report Card of Mitigation Actions Identified in 2004 State Plan:**

This section of the 2010 plan was revised from previous editions to eliminate redundancy with respect to the two tables which were previously contained within this section (*Table 1 – Report Card of 2004 Mitigation Strategy Actions*, and *Table 2 – State Agency Report Card of 2004 Mitigation Actions*). These tables, which demonstrated progress in the implementation of the mitigation actions described in the 2004 SHMP, have been added to the remainder of the mitigation strategies found in Tab 6, *Strategies*. The strategy table was updated to include the date the actions were added to the plan, details the current status of the strategies, and has been organized by agency rather than goal. Strategies which have been completed during the 2007-2010 update cycle have been removed and are now in Tab 13, *Annexes*. During the 2010-2013 update cycle, the 2010 completed projects will be removed, and the 2013 completed projects will be inserted to commence a cycle of update.